

THE IMPORTANCE OF PRIMARY PREVENTION

Rick Frey, PhD
Director, Preventive Medicine
Toiyabe Indian Health Project

Providers' Best Practices
& GPRA Measures Medical Conference
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TOIYABE
INDIAN HEALTH PROJECT

Toiyabe Service Area

11,435 sq. mi.

▣ Mono County →

Bridgeport Indian Colony

Mono Lake Kutzadika'a Tribe

Utu Utu Gwaitu Paiute Tribe

Antelope Valley Indian Community of Coleville Paiutes



← Inyo County

Bishop Paiute Tribe

Timbisha Shoshone Tribe

Fort Independence Indian Reservation

Lone Pine Paiute-Shoshone Reservation

Big Pine Paiute Shoshone Tribe of the Owens Valley







3 Levels of Prevention

CDC

- ▣ **Primary Prevention is designed to prevent disease from occurring.**
- ▣ **Secondary Prevention aims to find and treat disease early.**
- ▣ **Tertiary Prevention intends to manage complicated, chronic disease.**

Imagine a river...

We see someone floating by, drowning!

We swim out to save her!

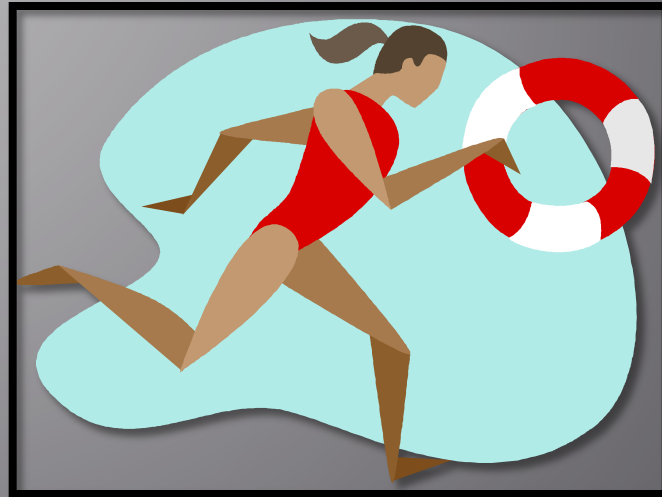
Then we see another...

**He's farther away, but we
rescue him.**

Then we see another...

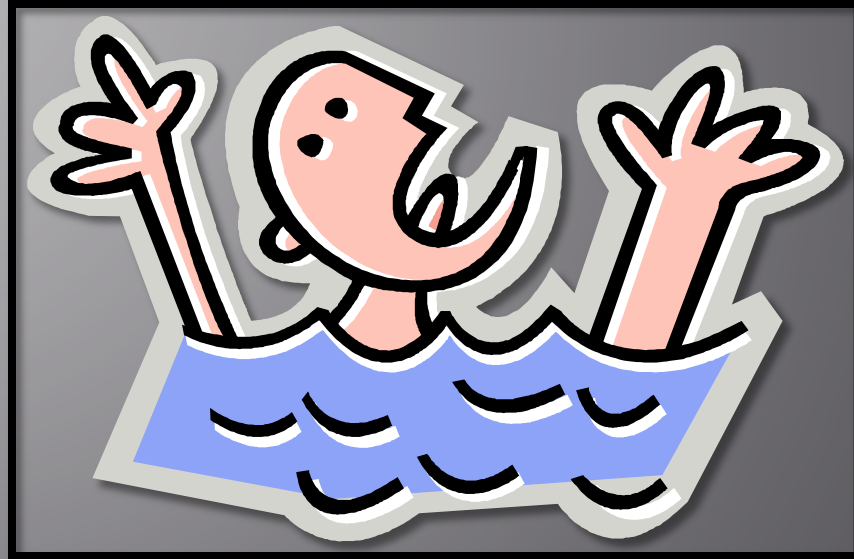


And another.....



And another...

Some drown before we can get to them...



...but we continue saving those we can until...

We're so exhausted that we can't continue.



And then people start floating past us in groups of fives...tens...hundreds.

Meanwhile...

One of us looks upstream and sees that a bridge has collapsed.



Motorists, unaware of the damage, continue to drive onto the bridge...

...and into the river!!

We're exhausted, but we can still think!!!

The river isn't the problem!



It's the motorists' lack of awareness about the bridge!!

We put up a warning sign that the bridge is out!



And we advise travelers about alternative routes across the river!



Primary Prevention is a lot like putting up that sign about the bridge being out, and advising about alternate routes.



Treating illness is our obligation,

But Preventing illness is vastly more important and cost effective!!



“Health”- care costs (2013) in the US:

\$2,800,000,000,000

That is 2.8 trillion American dollars!

That is 10 times the cost of health-care in 1980:

\$256,000,000,000

What is driving such an incredible increase?

It is estimated that health-care costs for chronic disease treatment account for over 75% of this amount. By the way, chronic diseases cause 7 in 10 deaths.

(Centers for Disease Control and Prevention. [Rising Health Care Costs Are Unsustainable](#). April 2011.)

In other words, chronic disease treatment costs

1.945 trillion dollars a year!

**Do we have a
Health-Care System**

or a

Disease-Care System?

Fact: 75% of our health-care costs are due to chronic disease treatment.

Fact: 2 TRILLION dollars per year are needed to treat chronic disease.

Conclusion?

Our medical providers are mopping up the floor around an overflowing sink. But no one is turning off the faucet!



Our “health-care system” is really a “disease-care system”.

Return on Investment

“The United States can — and must — do better, especially considering that its per capita health care spending is twice the average of other industrialized nations even as it still ranks a dismal 24th out of 30 for life expectancy.”

Julio Frenk

Dean, Harvard School of Public Health.

Boston Globe (10/2/13)

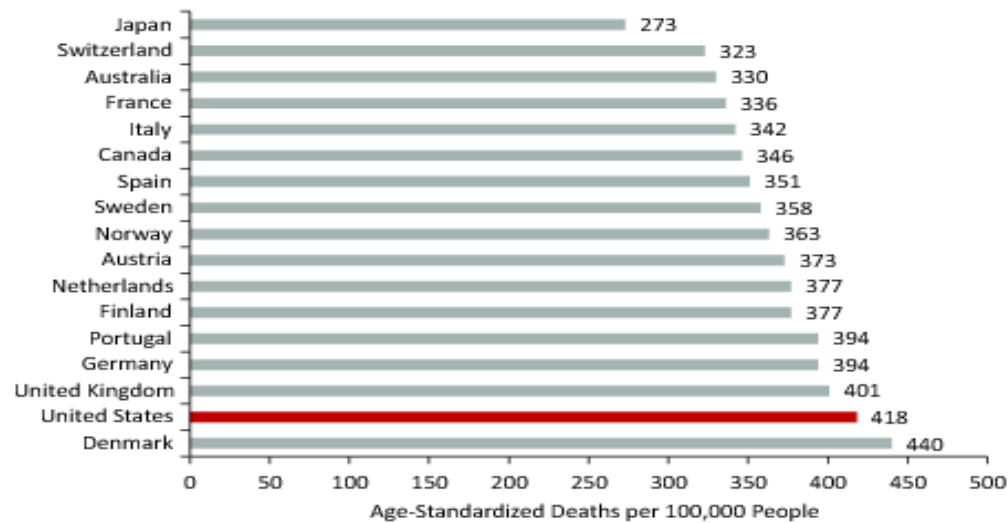


FIGURE 1-1 Mortality from noncommunicable diseases in 17 peer countries, 2008.
SOURCE: Data from World Health Organization (2011a, Table 3).

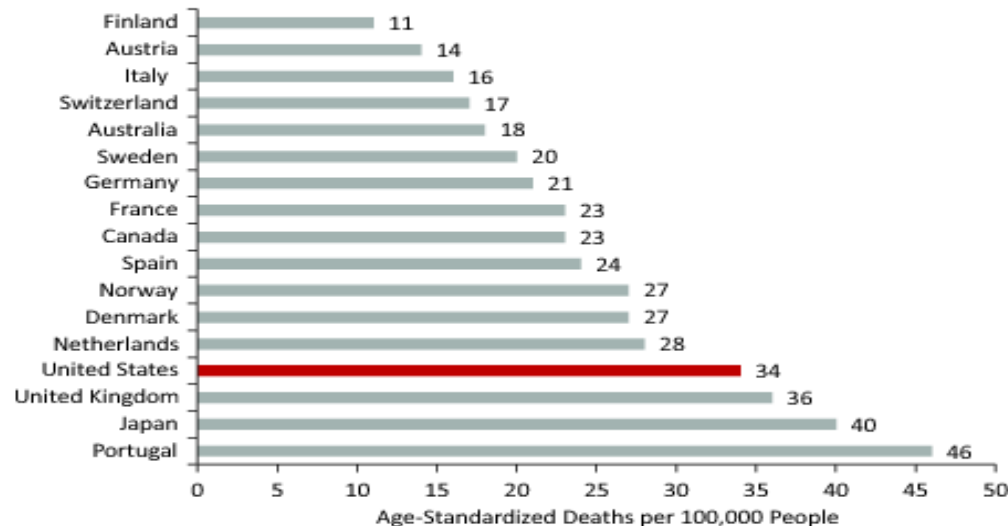


FIGURE 1-2 Mortality from communicable diseases in 17 peer countries, 2008.
SOURCE: Data from World Health Organization (2011a, Table 3).

Hospital Costs & Patients with DM

<u>County</u>	<u>% Hosp.</u>	<u># Hosp.</u>	<u>Additional \$</u>
LA	33.1	223,512	491,726,400
Sacramento	34.5	27,249	59,947,800
Inyo/Mono*	23.5	2,840	6,248,000
<hr/>			
California	31.0	729,314	1,604,490,800

* Combined with Alpine, Amador, Calaveras, Mariposa, and Toulumne

-- UCLA Center for Health Policy Research (May, 2014)

DM Hospitalizations & Health Equity

Statewide 31% of hospitalizations are complicated by patients with DM.
But among minorities, the percentage is higher:

<u>Ethnicity</u>	<u>% of “patients with DM” hospitalizations</u>
White	27.5%
Latino	43.2%
African American	39.3%
Asian American & Pacific Islander	38.7%
American Indian & Alaska Native	40.3%

Source: Office of Statewide Health and Planning Development, 2011

In view of unsustainable
“health” care costs and
forthcoming, unsustainable
burdens on medical
providers, even insurance
companies are starting to
get it!

Kaiser Family Foundation recently made one of the greatest understatements in the history of modern health care:

“The changing nature of illness has sparked a renewed interest in the possible role for prevention to help control costs.”

(<http://www.kaiseredu.org/issue-modules/us-health-care-costs/background-brief.aspx>)

Primary Prevention is all about the promotion of health and keeping people from getting sick in the first place.



At Toiyabe, it's about preventing chronic disease. To do that, we need to understand chronic disease.

What drives chronic disease?

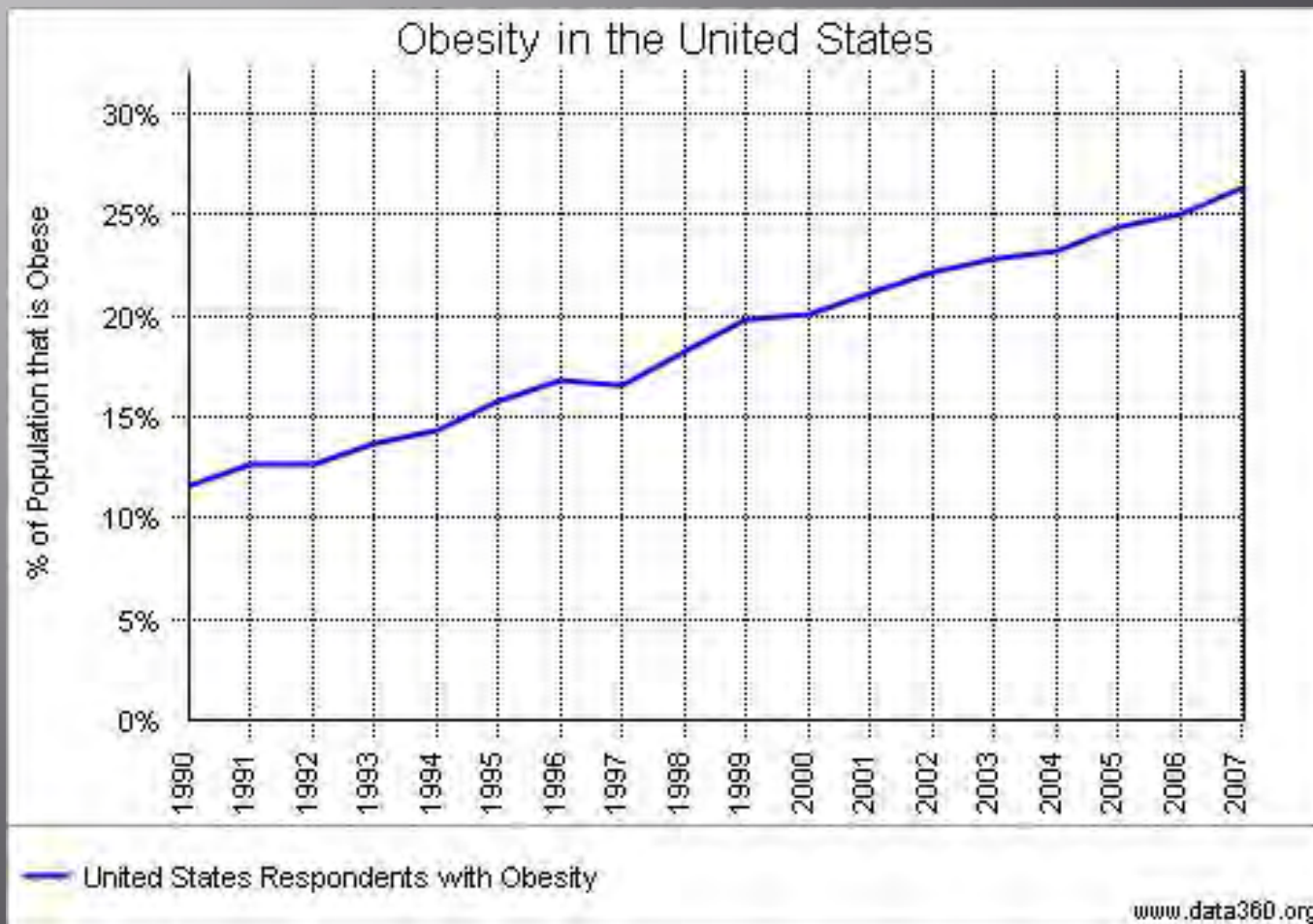
Unhealthy, preventable lifestyle choices determine the prevalence of chronic disease.

In the U.S., as of 2008, the two leading causes of preventable deaths per year are:

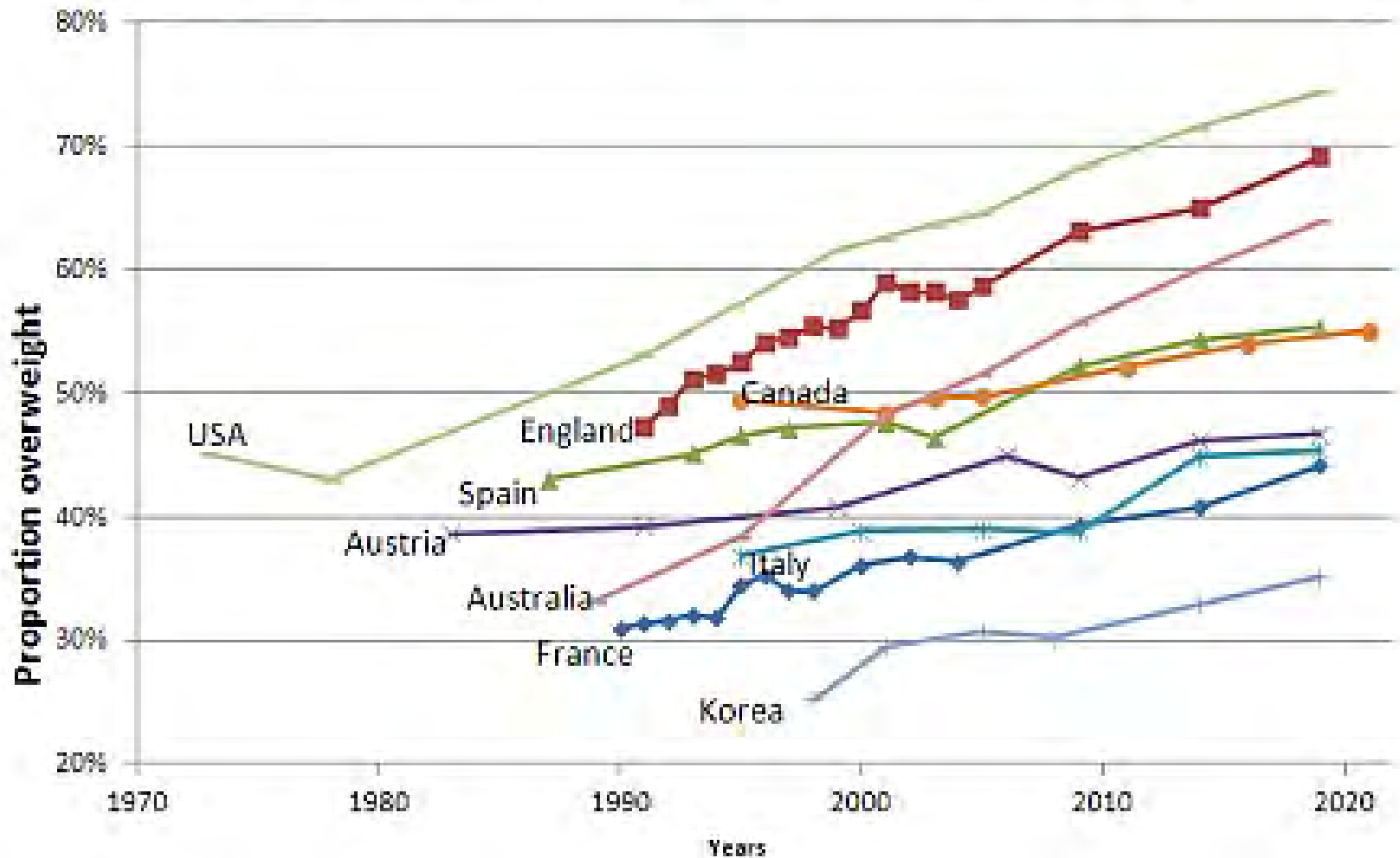
1. smoking commercial tobacco (435,000)
2. being overweight/obese (112,000)

Trends indicate that smoking rates are declining and we are dedicated to raising a generation of kids who never start. But overweight and obesity rates continue to rise.

US Obesity Time Chart



Past and projected future overweight rates in selected OECD countries



Organization for Economic Co-operation and Development
(34 countries)



The famous sculpture, David, before it left Italy for a one year tour of the United States



Can you see why the Italians want their sculpture back?!

International Fat Championships 2009

Rank	<u>Country</u>	<u>Percentage of Obese Individuals (BMI 30+)</u>
# 1	<u>United States:</u>	30.6%
# 2	<u>Mexico:</u>	24.2%
# 3	<u>United Kingdom:</u>	23%
# 4	<u>Slovakia:</u>	22.4%
# 5	<u>Greece:</u>	21.9%
# 6	<u>Australia:</u>	21.7%
# 7	<u>New Zealand:</u>	20.9%
# 8	<u>Hungary:</u>	18.8%
# 9	<u>Luxembourg:</u>	18.4%
# 10	<u>Czech Republic:</u>	14.8%

FLASH: In July, 2013 the US (31.8%) was passed by Mexico (32.8%)!!

(DM rate in Mexico: 17%)

**Under activity + Over eating =
Overweight/Obesity
(increased risk of Diabetes)**

“About 90-95 percent of diagnosed diabetes among adults is type 2 diabetes, and obesity is one of the major risk-factors for type 2 diabetes. So the most significant way we can prevent or delay the onset of type 2 diabetes is through diet and exercise.”

Ying-Ying Meng, DrPH

Policy Brief, UCLA Center for Health Policy Research
May, 2014

Preventing Obesity

Our primary prevention efforts at reducing overweight and obesity rates are based on two strategic approaches:

1. Increase healthy, affordable food choices.
2. Increase physical activity opportunities.

And two philosophical approaches:

1. Change the environment.
2. Make those changes where people live, work, study, and play.

Examples












Wellness Center

SOBBY WOOD
CLOSED

8/ 4/2012



8/ 4/2012



8/4/2012



8/ 4/2012





8/ 4/2012







8/ 4/2012



8/ 4/2012





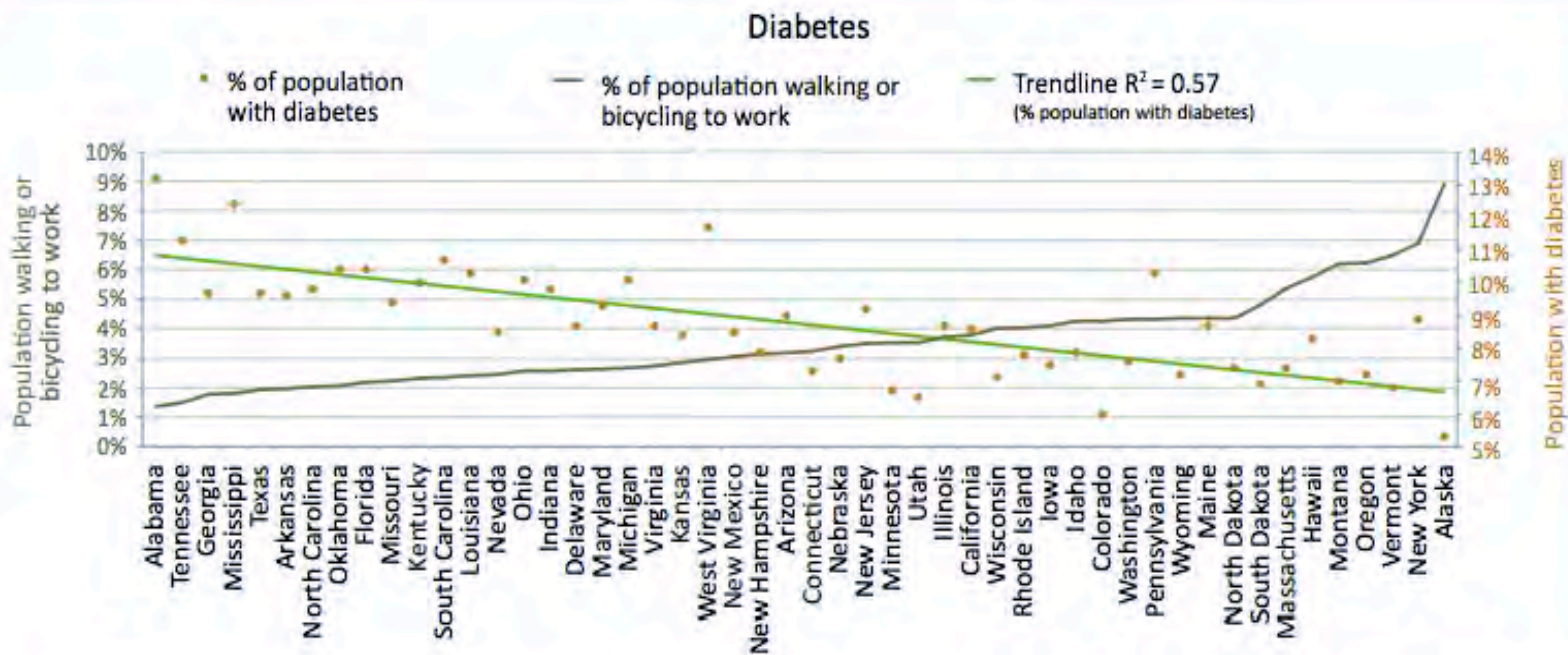


Bike Program Kick-Off

Sept. 8, 2013



↑ Active Transportation, ↓ Diabetes



Sources: ACS 2009–2011, BRFSS 2010

**Before and After Shots
Bishop Tribal Community Garden 2013**









BE ALERT!

BE ALERT! This is a warning sign posted on the door. The text is small and difficult to read, but it appears to be a safety notice regarding the gym equipment.









**WEEKLY EXERCISE
SIGN-IN**

Date	Name	Program	Time
11/10/97	Carol Leaver	Weight Training	11:30
11/11/97	Carol Leaver	Weight Training	11:30
11/12/97	Carol Leaver	Weight Training	11:30
11/13/97	Carol Leaver	Weight Training	11:30
11/14/97	Carol Leaver	Weight Training	11:30
11/15/97	Carol Leaver	Weight Training	11:30
11/16/97	Carol Leaver	Weight Training	11:30
11/17/97	Carol Leaver	Weight Training	11:30
11/18/97	Carol Leaver	Weight Training	11:30
11/19/97	Carol Leaver	Weight Training	11:30
11/20/97	Carol Leaver	Weight Training	11:30
11/21/97	Carol Leaver	Weight Training	11:30
11/22/97	Carol Leaver	Weight Training	11:30
11/23/97	Carol Leaver	Weight Training	11:30
11/24/97	Carol Leaver	Weight Training	11:30
11/25/97	Carol Leaver	Weight Training	11:30
11/26/97	Carol Leaver	Weight Training	11:30
11/27/97	Carol Leaver	Weight Training	11:30
11/28/97	Carol Leaver	Weight Training	11:30
11/29/97	Carol Leaver	Weight Training	11:30
11/30/97	Carol Leaver	Weight Training	11:30

STRENGTH TRAINING RECORDED EXERCISES

Exercise Name	Sets	Reps	Time
1. Bench Press	3	10	00:00
2. Squat	3	10	00:00
3. Deadlift	3	10	00:00
4. Overhead Press	3	10	00:00
5. Rowing Machine	3	10	00:00
6. Lunges	3	10	00:00
7. Calf Raises	3	10	00:00
8. Plank	3	10	00:00
9. Pushups	3	10	00:00
10. Core Exercises	3	10	00:00
11. Cardio	3	10	00:00
12. Flexibility	3	10	00:00
13. Balance	3	10	00:00
14. Strength	3	10	00:00
15. Cardio	3	10	00:00
16. Flexibility	3	10	00:00
17. Balance	3	10	00:00
18. Strength	3	10	00:00
19. Cardio	3	10	00:00
20. Flexibility	3	10	00:00
21. Balance	3	10	00:00
22. Strength	3	10	00:00
23. Cardio	3	10	00:00
24. Flexibility	3	10	00:00
25. Balance	3	10	00:00
26. Strength	3	10	00:00
27. Cardio	3	10	00:00
28. Flexibility	3	10	00:00
29. Balance	3	10	00:00
30. Strength	3	10	00:00

BELL
PATENT NO.
4,202,243



















Outdoor Exercise Center

Safety Instructions ▲

The usage of the equipment is meant for individuals 17 years and older.
The usage of this equipment is without supervision and meant for healthy individuals only.
Always warm up before, and cool down after your workout.
Read the safety instructions for the proper use of each piece of equipment.
Always use proper posture which will greatly reduce chances of injury and maximize exercise benefits.
Focus on only working the muscle group intended for the exercise you are doing.
Always breathe properly. Never hold your breath during any part of an exercise. Holding your breath may cause severe intra-thoracic pressure leading to dizziness, blackout, or worse! The rule of thumb is to exhale slowly during the exertion phase and inhale on the return phase of an exercise.
To insure safety, please take a minute to rest between exercises.
Carefully inspect each unit before using it. If you recognize a problem, please do not use the unit. Responsibly inform others about the problem.

Warnings ▲

Please be advised that the usage of this equipment is at your own risk, peril, and responsibility.
Children under the age of 17 are not allowed to use the equipment without close side supervision.
Individuals should receive clearance for moderate to vigorous physical activity by their medical provider prior to utilizing this equipment.
Keep a safe distance of at least four (4) feet from the exercise equipment and all moving parts while equipment is in use by others. Moving elements can be dangerous. Never allow your fingers, toes, hair, and other body parts near these elements while they are in motion.
Appropriate footwear must be worn when operating this equipment.
During exercise, pay attention to how your body feels. If abnormal pain or discomfort occurs, STOP exercise immediately.

Remember, you are not alone. Use each unit for a reasonable amount of time so others can enjoy it too.
For more information about this outdoor exercise center, contact: The City of Bihaq 760-873-5833 or www.ci.bihaq.us































Painte Palace Casino
JACKPOT CITY
FULL CIGARETTE SERVICE







These have been a few examples of what a clinic can do to empower the communities it serves through local, environmental infrastructure changes that are designed to promote health and prevent disease.





Primary prevention is our strategy to mitigate unsustainable health-care costs and to reduce pain and suffering due to preventable chronic disease.

It's a strategy that we hope more and more IHS clinics will explore!

Thank you!

Rick Frey

Toiyabe Indian Health Project, Inc.

rick.frey@toiyabe.us

760-873-8851